BASIC CRITERIA FOR ESTIMATING THE VIABILITY OF SMALL ISLAND STATES

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SMALL ISLAND STATES - A NEW PROBLEM

The emergence of a new category of states made of only small islands is a relatively recent phenomenon on the international scene. The appearance of new states since World War II has been so rapid that the international community has been unable for the time being to make analyse the specificity of all the problems which arise, lacking previous experience of a status of independence for small islands.

Throughout the history many small islands were included inside larger political powers, forming long chains of stop-overs and trading centres. They contributed to the transportation and storage of goods and acquired a role in the strategic control and security of the continental powers. This was the case during antiquity and the Middle Ages for the Mediterranean thalassocraties. The Atlantic powers fought for the use and control of the East Indies Route from the sixteenth to the nineteenth century (Portugese and Dutch first, French and British later).

Small islands also became "plantation paradises" producing spices for a growing European market during the first Industrial Revolution. Starting with the subtropical Central Atlantic islands during the sixteenth century, plantations of tropical products spread to the West Indies during the seventeenth. Small islands producing tobacco, sugar, cotton, indigo, coffee, cocoa and other products were the focus of a new economic system which also included the transportation of slaves, European manufacturers and products of tropical agriculture. But small islands, often devastated by European wars and affected by natural disasters, were soon unable to provide the volume of production needed by the growing world market.

The small islands of the Indian Ocean joined the plantation system during the eightteenth century, and those of Polynesia and Melanesia in the Pacific around the middle of the nineteenth century, but they were not able to compete with the big tropical islands and continental

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countries (Brazil, tropical North America, Java during the eighteenth, Ceylon, North India, Egypt during the nineteenth, Malaysia, Sumatra, French Indochina, the countries of the Gulf of Guinea, East Africa, Natal, Queensland, Cuba and others during the twentieth).

At the beginning of the twentieth century the island world was completely integrated within the imperial system divided between the "Rule Britannia" and the conflicting old-established (Dutch and French) or more recent (American and German) competitors. Spain, Portugal and Denmark retained possession of some relics of an empire which was either vanishing or had never really appeared.

Of the 51 founder members of the United Nations, seven were islands. Three were as large and populated as many of the continental states (United Kingdom, Australia, and Phillippines), and four (New Zealand, Cuba, Haiti, and Dominican Republic) were big enough and had a socio-economic and historical background which allowed them to take their place naturally among the other members. The admission of Iceland (December 19, 1946) was an innovation opening the way for a new class of Island States: the United Nations for the first time provided the possibility for a small island community to express its identity and enjoy the same international status as the bigger States. However, for about fifteen years (1946-1960) Iceland remained a unique case. The new Island States during this period were much bigger: (Indonesia, September 1955; Ireland and Sri Lanka, December 1955; Japan, December 1956; Madagascar, September 1960).

The admission of Cyprus (September 1960) and then of Jamaica and Trinidad-Tobago (September 1962) could be seen as an intermediate step. But it was with the admission of Malta (December 1964) and the Maldives (September 1965) that Island States on a new, markedly smaller scale were recognized by the international community. Twenty Island States were admitted to the United Nations between 1964 and 1984, seven during the decade 1964-1973 and thirteen during the following decade. Those admitted during the second decade have on average three times less population and a gross national product twelve times smaller than those admitted during the first decade (Table 1, see Appendix).

It is, therefore, now opportune to look for specific criteria for a category of States the smallness is affected by their particular geographical situation and a specific kind of evolution of society and natural environment constrained by endemicity. In addition to quantifiable factors, the way of life becomes an important variable in assessing the viability of Island States.

BEING A SMALL ISLAND - RELATIONSHIP BETWEEN NATURE AND SPACE

By definition an island is a piece of land
1. Emerging above the surface of the sea at the highest tide;
2. Surrounded by water on all sides;
3. Whose dimensions are smaller than those of a continent.

The distinction between an island and a continent is related to the relative influence of the ocean and the land mass itself. True islands are those which are subject to, and cannot modify, the influence of the oceanic hydro-climate because their volume is too small to have any effect other than to accentuate the character of the oceanic system. By contrast, a continental mass generates its own conditions of biological and natural environment and of partitioning of space. If an island has an emerged volume large enough to generate its own climate effects, it fits into the continental category.

The shape of an island plays a major role in the extent of oceanic influence. Not only the surface and the emerged volume but also the character of the coastline affects the contact between land and sea. Indeed, a true insular oceanic system is limited to islands with an area of less than 1000 km2 when a montainous relief rising above 1500 to 1800 meters. It can be three or four times larger (3000 - 4000 km^2) if the island is flat. The continental system is dominant when a mountainous area of more than 1000 meters average altitude covers an area of more than 20,000 km^2.

The best way to quantify the influence of the ocean on an island is to look at the ratio between the coastline and the land area: it can be called the **shoreline index.** An island with a short shoreline will be less influenced by the sea than one where gulfs, bays and lagoons multiply and expand the interface between the earth and the sea. The smaller the emerged surface, the larger will be the ratio. Conversely, the ratio falls as the effect of land mass relegates the length and layout of the coast to a secondary role. The shoreline index can provide an objective classification of the relative influence of the ocean on an island system.

Greater than 1: **True Oceanic Island** - atolls and low islands with lagoons (Kiribati, Tuvalu, Tuamotus, Tokelau, Marshalls, Maldives, Chagos, Bermuda, Bahamas, Turks and Caicos, Cayman islands...).

1 to 1/10: **Small Island** - raised limestone block (Niue, Nauru, Barbados, Malta, Gozo); volcanic block (Samoa, Mariannas, Comoros, Reunion, Mauritius, Dominica, St. Lucia, St. Vincent, Grenada, Cape Verde, Sao Tome...); the emerging summit of a submerged land mass (Seychelles).

1/10 to 1/20: **Large Island** - more complex, included in a larger system: Viti Levu and Vanua Levu in Fiji, New Caledonia, Trinidad, Jamaica, Cyprus.

1/20 to 1/60: **Continentalized Island** - Taiwan, Cuba, Sri Lanka.

Less than 1/60: **Continental Island** - Madagascar, Irian, New Zealand.

Interactions resulting from the position of small islands relative to each other and to continental islanders or continents also need to be considered. An indicator is needed to distinguish categories of islands according to their spatial relationships. An **isolation index** can reflect this factor. For this purpose the ratio between the area of a territory and the oceanic area referred to as the Exclusive Economic Zone (EEZ) can be used. When the EEZ is fully extended without any interference by other territories, an isolated small island can claim up to 430,000 km^2. The ratio of oceanic to land area is limited by the vicinity of other territories, given the convention of the median line border EEZ's. The isolation index is shown in Table 2 (see Appendix). An index of less than 100 reflects a dependency between islands and their neighbors. If the index is as high as 15,000 neighbors are so far away that they fall outside the network of normal relationships. The value of this classification is underlined by the existence of gaps; this marks the distinction between small island territories in their spatial relationships.

Another way of assessing objectively the relative isolation of an island is to examine the evolution of its natural colonization by plants and animals. The number of species is correlated with the distance from a center which is the source of the natural population (a continent or large island). The number of species of land as of marine life decreases rapidly from the border to the center of an oceanic area.

The impact of the insularity depends not only on the number of species, but also on the survival of species thanks to the isolation islands offer from competitors or predators. Many plants or animals disappear elsewhere due to pressures of evolution survive only on islands, giving an endemic population. The ratio between the total number of species living on an island and the number of the endemics (relics and relicts) constitutes the **endemic index**[1].

[1] An endemic species is one that lives in a particular area and nowhere else. Geographical isolation is decisive here, since the species is strictly limited to the region and unable to get out of it. For present purposes, this straightforward definition of endemism should suffice. If one wanted to categorize it more finely one could distinguish two main categories: relics and relicts. Relics are living remnants of a main stock (or of basal lines of evolutional branches which have differentiated elsewhere). They are living fossils in a paleontological sense. Relicts are living representatives of environments that have disappeared. They are therefore almost always living fossils in a biogeographical or ecological sense.

BEING A SMALL ISLAND - THE WEIGHT OF PEOPLE AND RESOURCES

The problem of isolation can be compensated by the number of inhabitants. A large population can support local activities and production which a small one cannot. It is very difficult for islands populated by only a few thousand people to generate and control their own development. Abundant natural resources like the millions of tons of phosphate in the Republic of Nauru can only be exploited thanks to the employment of immigrants, while the 5,000 native islanders invest the revenues in infrastructure or outside the country. Most island territories which have achieved a high standard of living have done so as a result of private or public foreign investment (American Samoa, Cayman Islands).

Tables 3 and 4 (see Appendix) classify island territories in terms of the size of GNP as micro, mini, small, medium, big and too big. The island territories are also classified according to per capita income as poor, underdeveloped, starting, way to development and developed.

Some island economies are too small to sustain effective development by themselves. Their development depends on outside factors. These econom-ies have a total GNP of less than US $ 180 million and a GNP per capita of under US $ 2,000 per annum and indeed often under US $ 1,300 per annum. Medium size economies have a total GNP of up to US $ 600 million , with a per capita GNP of more than US $ 3,500. In these cases, the small island territory stands a chance sustaining its own development if the internal and external support remain at the same level. The status and trends for island countries with medium or large populations is quite different, as can be seen from Tables 3 and 4. The classification in these tables is characterized by very noticeable gaps which make the separation between the two categories evident. At standards of living superior to US $ 3,500 per capita, a large population can be a positive factor enhancing development prospects (Cyprus, Canary Islands, Reunion, Trinidad and Tobago). Conversely, under US $ 2,000 capita, a large population can be a brake on development calling for control and a change of structure (Fiji, Mauritius).

According to Table 5 (see Appendix) island countries with a total GNP of less than $180 million dollars and a per capita GNP of less than $1300 US $ are truly poor. Island countries with a GNP of $700-$2500 million and per capita income $3500-$6000 are considered potentially dynamic (Guam, U.S. Virgin Islands, New Caledonia, French Polynesia). Although countries such as Seychelles, Antigua and Barbuda, Maritius and Fiji have outgrown the category of poor countries, they still have a long way to go to reach the status of a developed country.

BEING A SMALL ISLAND - SATELLITIZATION AND HIERARCHY

The interactions resulting from the position of islands relative to each other and to the continental centers must also be taken into account. The

island universe is subject to a sort of gravitational force which leads to the satellitization of weaker masses around major poles. The attraction of the dominant pole will be inversely proportional to the distance separating the two units and directly proportional to the disparity between their overall socio-economic volumes. It can be expressed by an **index of attraction** where the value of distance is given in 100 nautical miles and the economic weight in terms of Gross National Product (millions of US $).

This explains the natural tendency towards satellitization of small islands with respect of continental masses. This same phenomenon leads to the establishment of a succession of links resulting in a hierarchy among the elements of an archipelago (Fiji, French Polynesia, Seychelles). If the force of attraction is not sufficient or if the elements of heterogeneity are too strong a breakdown occurs. For example, the Gilbert and Ellis islands colony which became the states of Kiribati and Tuvalu. The separation of Mayotte when the Comoros became independent. The break-up of the former Trust Territories of Micronesia (T.T.P.I.) when the attraction which Guam could have provided as a pole was blocked for political reasons.

The importance of socio-cultural factors and their ultimate political expression should be underlined in this respect. The more numerous and powerful the links with the outside world, the less pronounced will be the character of the island. On the other hand, geographical, socio-economic and political isolation will increase the characteristics of insularity. The political divisions and the socio-economic dispersion of the lesser Antilles greatly increases the relative insularity of islands which are close to each other.

One could in short have a few main categories along the following lines:
- island isolated physically, economically and politically;
- islands grouped in an archipelago physically, humanly, economically and politically.

Among these islands there is hierarchy:
- dominant island pole
- relay islands
- dependent islands.

Within each group of islands, there are the following possibilities:
- *independence* economically and politically;
- *indirect dependence* though spatial, socio- economic and political actors;
- *direct dependence* though satellitization or integration.

Michael P. Hamnett, Russ J. Surber, Denise E. Surber, and Mark T. Denoncour, in a study *Unbalanced Books: Economic Vulnerability in the Pacific*, discuss the following six factors of dependency:

1. Dependence on foreign aid
2. Export diversity
3. Food substitutability
4. Fuel dependency
5. Fiscal integrity
6. Political constraints.

Hamnett et al provide indices for all of these factors, and use these individual indices to compute a composite weighted index.

TOWARDS AN ATTEMPT TO QUANTIFY VIABILITY CRITERIA FOR ISLANDS

An attempt will be made to quantify the elements discussed so far by assigning indices to them.

For the sake of convenience, we will consider the case of a whole territory in order to be able in the first instance to use statistical data readily available. However, the method can also be applied to each island of an archipelago included in the same territory. We will discuss thirteen positive and seven negative criteria which can be quantified. We shall assign relative weights to them in the light of trial and error, without claiming that they will fit absolutely every case.

POSITIVE FACTORS

1 - *Cultivated land area available per inhabitant*

This expresses the capacity for agricultural production. However, the yield of the land will vary according to its use. The area under pasture should be reduced according to the system of livestock rearing from two-thirds in a semi-extensive system to nine-tenths in an extensive system so as to obtain a proper relationship to cultivated land. Plantations can also be more or less intensive. If one takes the area under sugar cane as the standard of reference, one can regard plantations of pineapples, of plants producing essences for perfume, vanilla and spices as similar. On the other hand, the cultivation of fruits (bananas, avocado, pears, citrus fruits), vegetables and flowers, can be assigned a factor of 1,5 to 2 according to their yield. However, coffee or cocoa plantations should not count for more than .8 or even .5 and coconut stands should be reduced even further, from two thirds when cattle rearing is also practiced to three quarters when only copra is produced. The figure thus obtained in hectares per inhabitant is to be multiplied by one hundred.

2 - *Area of lagoon and sea exploited*

This section is concerned with the fishing zone that normally is exploited by the island populations either in the nearby ocean, or in the lagoons of atolls or around volcanic islands.

To take the yield of fishing into account the index should be expressed in units of ten hectares per inhabitant. In the case of aquaculture, the surface exploited should be multiplied by one hundred.

3 - *Export of food and marine products*

The value of these exports represents the output of agriculture, aquaculture and fishing which is surplus to the needs of the island. The index should be expressed in US $ per inhabitant.

4 - *Percentage of the labour force in the secondary sector*

The percentage of workers employed in manufacturing and construction as a share of the total active population reflects the extent to which the island economy has developed its activities of processing and investment. The percentage is the index.

5 - *Mineral exports*

The value of the exports of mineral products firstly reflects the importance of mining activity. This should be reflected in the sales of minerals or petroleum expressed in hundreds of US $ per inhabitant.

The processing of minerals to produce metal or refined petroleum products should be added to this. To take account of the value of such processing for the island economy, this index should be expressed in terms of US $ per inhabitant.

6 - *Resources of tourism and services*

The contribution of tourism and services to the island economy can be estimated by an index expressed in hundred of US $ by inhabitant for the surplus between the receipts for the island and the expenses made outside by their residents.

7 - *Population of the territory*

To take account of the importance of population thresholds in the economic structure, one must distinguish island territories according to their ability to pay for their infrastructure in the light of the number of users served. The economy also depends to a large extent on whether or not an internal market exists capable of supporting activities which meet the territory's own consumption needs.

For this criterion, we will take the total number of inhabitants regardless of their standard of living. Below 10,000 inhabitants, the index will be set at zero, from 10,000 to 20,000 inhabitants at 10, from 20,000 to 100,000 inhabitants at 50, from 100,000 to 250,000 inhabitants at 100, from 250,000 to 500,000 inhabitants at 200 an above 500,000 inhabitants at 300.

8 - *Rate of natural increase of population*

The difference between the birth and death rates reflects the general condition of the population, its state of health and its will to survive as a community. Population growth is thus considered as a factor of consolidation, although it can present direct problems of over-population: the index taken is the rate of natural increase expressed per thousand inhabitants.

9 - *Urban as a percentage of the population*

Towns give dynamism to island life: they also provide a solution to infrastructure problems by concentrating the population.

The degree of urbanization is expressed as the percentage of inhabitants living in areas provided with the infrastructure and tertiary services which characterize this type of relational life. Suburbs are included in the urbanized population.

10 - *Enrollment at the second and university levels of education*

The managers and technicians indispensable to economic and social life are made at the secondary level of education. It is the number of pupils in school which allows one to estimate the chances an island community has of being able to develop by means of its own human resources.

11 - *Places of religious worship and philosophical associations*

This characteristic is intended to reflect cultural dynamism, which is always difficult to quantify. Since every church wishes to gather its members together on certain occasions, religious expression is considered as a quantifiable symbol of the cultural content of a society. They could be counted simply by taking into consideration the number of buildings where the faithful come together around one religious official. A system of weighting would permit a more rigorous estimate by adding pilgrimages, and multiplying monasteries and more important religious institutions by a coefficient of 2 while chapels or simple places of prayer with no permanent religious official would be assigned a coefficient of .3. The index would be expressed in tens of units of places of worship and philosophical circles (Masonic lodges).

12 - *Official assistance to the working of island life*

This consists of direct or indirect contributions provided by a partner of the island territory.

The partner may be a metropolis, an associated state, a foreign state, or an international organization. This type of contribution from outside makes up for the weakness of local production and makes it possible to meet the cost of imports without exporting.

For the sake of convenience, the index should be taken to be aid received as a percentage of GDP per head. This constitute a good reflection of the outside contribution to underwriting island viability in a certain set of circumstances.

13 - *Net private transfers*

These provide support in a variety of forms: contributions by expatriates for the upkeep of their family, investment when emigrants return, pensions received from overseas, private investment for economic projects. From these receipts should be subtracted the outflow of funds through the transfer of capital intended for private investment overseas, the remuneration of overseas capital and various forms of repatriation of funds by non-island residents.

The index taken will be the net balance of private transfers expressed in US $ per head.

In contrast to the 13 positive criteria supporting island life, there are some negative factors influencing the island life. These negative factors are discussed in the next section.

NEGATIVE FACTORS

1 - *The effects of natural disasters*

The damage done periodically by natural disasters constitutes a permanent burden on island life. These disasters require greater investment in infrastructure than would otherwise be necessary. They result in unpredictable paralysis of the apparatus of production.

One can therefore assign a permanently negative index to areas subject to disasters. Taking an average weighting on the basis of periodicity of the phenomena, the index 20 can be proposed for cyclonic areas defined as those suffering at least one devastating cyclone every 50 years, the index 10 for volcanic or seismic areas and the index 10 for areas subject 10 frequent drought (1 every 20 years).

2 - *Food imports*

They can be seen as the other side of the coin with respect to exports and reflect a state of dependency on the outside world. As an index, they will correspondingly be expressed in US $ per inhabitant.

3 - *Energy imports*

They reflect the general state of development of the economy while expressing its dependency. As a counterweight to the development of mining and manufacturing, they reveal the necessity for links with overseas markets. As with the export of metal and refined petroleum products, they will be expressed in ten of US $ per head.

4 - *Emigration*

Although the departure of emigrants brings relief from some pressure due to overpopulation relative to available resources, the phenomenon reveals a state of crisis which is a negative factor for development. We will calculate the emigration index like that for the rate of natural increase in population, as the number of departures for every one thousand inhabitants.

5 - *Racial tensions*

Antagonism between different racial groups in the population can be very redoubtable handicaps. The tensions are all the greater when only two groups face each other. Intermediate groups have the effect of reducing these tensions which in the end disappear as the number of groups becomes larger.

If the island population constitutes one homogenous group, this handicap does not exist. For two groups face to face, the handicap index will be fixed at 200, for three groups at 100, for groups at 50, five groups at 20 and beyond that the phenomenon disappears.

6 - *Island dispersion*

The larger the number of islands making up a territory, the more the difficult becomes the provision of inter-island services. The cost of services increases as a result of productivity lowered by scattered effort. Dispersion makes duplication necessary and result in a lower yield on investment. The fragmentation of groups isolated by distance favors socio-cultural compartmentalization.

A one-island territory does not face this handicap, but it grows very rapidly as a function of the number of islands making up a territory. The index taken will be 20 for a territory of between 2 and 4 islands, 50 for between 5 and 10, 100 for eleven islands or more.

7 - *Isolation with respect to the great geopolitical centers*

The life of small islands is deeply conditioned by the networks of relations established from a few important centers which hold the power of decision and who maintain their domination by their control over the exchange of merchandise, passenger transport, financial flows, economic decisions in the market, and the political orientation of a zone of influence. Relations with these few major centers depend largely on distance. this makes it possible to quantify.

In order for an island to exist as a distinct entity, it must base its exchange relationship with at least two major geographical poles.

Where territories are concerned, these poles can be chosen:

- in Western Europe preferably with London or Paris, but possibly also with Lisbon, Madrid or Rotterdam.
- in North America preferably with Los Angeles or San Francisco to the West, New-York or also Montreal or Miami to the East.
- in peripheral dynamic centers: Sydney, Auckland, Cape Town or Tokyo, Singapore or Honolulu.

To express the handicap of the distance of the island territory from the dynamic centers which are indispensable to it, the sum of the distance in hundreds of nautical miles from the capital of the territory to a town chosen in 2 of the 3 groups defined above can be taken.

To establish the overall index of viability the positive factors will be added together, then the sum of the negative factors will be subtracted. If the total is negative, the territory is unviable in the set of circumstances in which the reference figures were established. If the overall index is lower than 100, the level of viability is weak and precarious. From 100 to 400, viability becomes more stable, and above 400 dynamic viability becomes conceivable; it will be achieved above 1,000 (see Table 6 in the Appendix).

A table of this kind fringes out the factors of structural inertia which from the outset place the territory in a certain position favorable or unfavorable for its viability, and the factors on which development efforts and external influence can operate. This way of looking at things has the advantage of underlining that the aggravation of many single factors must be taken into account in the overall equilibrium.

By considering the interactions revealed by the table, it can be seen that some solutions may have advantages but also counterbalancing disadvantages. For example: if a territory which is too vast breaks up, the negative factor due to dispersion will certainly diminish, but the positive factor which the size of population constitutes will also diminish. The number of tourists is counterbalanced by an increase in food and energy imports; furthermore it can lead to social destabilization resulting in emigration and racial tension.

This study discussed the natural and human factors influencing the island life. In conclusion it is recommended to develop a scientific atlas to incorporate the major physical, human, economic and social factors affecting the islands. It can become an important instrument in estimating the viability of the islands and in turn to form effective policies.

APPENDIX

TABLE 1.
ISLAND STATES WITHIN THE UNITED NATIONS FROM 1960

State	Admission	Area km2	Population (1000 hbt 1981)	GNP 1981 millions US $
Cyprus	1960	9,251	630	1,750
Jamaica	1962	10,990	2,220	2,630
Trinidad-Tobago	1962	8,897	1,180	4,920
Average		9,710	1,340	3,100
Malta	1964	316	346	1,190
Maldives	1965	298	160	40
Barbados	1966	431	268	880
Mauritius	1968	431	268	1,230
Fiji	1970	18,274	650	1,290
Bahrain	1971	622	360	2,350
Bahamas	1973	13,935	248	800
Average		5,150	430	1,114
Grenada	1974	344	115	100
Cape Verde	1975	4,033	330	100
Sao Tome	1975	964	88	40
Comoros	1975	2,171	370	110
Western Samoa	1976	2,935	159	130
Seychelles	1976	280	66	110
Dominica	1978	751	87	60
Solomon Islands	1978	28,530	235	150
St. Lucia	1979	616	118	120
St. Vincent	1980	388	103	70
Antigua-Berbuda	1981	442	78	120
Vanuatu	1981	11,880	121	40
St.Kitts & Nevis	1983	269	50	50
Average		4,050	150	92

TABLE 2. *GROUPING ISLANDS TERRITORIES BY THE ISOLATION INDEX*
(Ratio between EEZ surface and emerged land).

Integrated group - 100	Gap 100 600	Oceanic	Gap 600 2000	Isolated	Gap 2000 3000	Far	Gap 3000 8000	Away +15000	8000 15000
Dominica	40	Barbados	610	TTPI		3384		Nauru	15328
Samoa West	41	Mauritius	860	Seychelles		3571		Tokelau	29000
Solomons	47	Tonga	1000	Kiribati		5145		Tuvalu	34615
St. Lucia	48	Sao Tome	1150	Cook		7625		Pitcairn	160000
Vanuatu	57	Wallis Futuna	1176						
Fiji	71	Niue	1506						
St. Vincent	88	Fr. Polynesia	541						
New Caledonia	91	Samoa Am.	1980						
		Cape Verde	1990						

TTPI : Trust Territory of Pacific Islands (Micronesia).

TABLE 3. *GROSS NATIONAL PRODUCT (MILLION US$, 1980-1981).*

Island/ Territory Population 1000 HBT	Under 20	**Micro** 20-70	**Mini** 70-120	**Small** 120-180	Gap	**Medium** Low 700-1000	High 1000-1500	**Big** 1500-2500	Gap	**Too Big** 3500-3500	Gap	5600 -6800
Under 30	Anguilla Montserrat TS. Kaicos Niue Tokelu Tuvalu Wall. Ft	Br. Virgin. Cayman Cook Nauru		Am. Samoa								
Gap												
Micro 50-100		St. Kitts & Nevis Dominica Kiribati Sao Tome	Antigua	Seychelles		Bermuda						
Mini 100-200		Tonga Vanuatu Maldives	Grenada St. Lucia St. Vincent TTPI	W. Samoa		Am. Virgin	N.Calenonia F. Polensia					
Small 200-350			Cape Verde Camorose	Salomons		Bahamas Barbados	Malta N.Antilles Guadalupe	Martinique		Bahrein		
Gap												
Medium 550-650							Fiji	Cyprus Reunion				
Gap												
Big 950-1400							Mauritius					Trinidad Canarias

TABLE 4. *G.N.P: US$, PER ANNUM PER CAPITA (1980-1981).*

Island/ Territory Population 1000 HBT	**Poor** 0-450	**Underdeveloped** Low 450-900	Medium 900-1300	Gap	**Starting** 1600-2000	Gap	**Rate of Development** Slow 3500-4500	Fast 4500-6000	**Developed** 6000-8000	Gap	13000-
Under 30		Anguilla Tokelu Tuvalu	Turck-Kaikos Niue Wallis and Futuna Cook		Montserrat Br. Virgin		Cayman W. Samoa	Nauru			
Gap											
Micro 50-100	Sao Tome` Kiri Bati	Dominica	St. Kitts and Nevis		Seychelles Antigua						Bermuda
Mini 100-200	Maldives Vanuatu	Grenada St. Vincent Tonga W. Samoa	St. Lucia TTPI						Am. Virgin Guam N. Caledonia F. Polynesia		
Small 200-350	Cape Verde	Salomons					Malta Bahamas Barbados Guadalupe	Neth. Antilles Martinique	Bahrein		
Gap											
Medium 550-650					Fiji		Cyprus Reunion				
Gap											
Big 950-1400			Mauritius				Canarias	Trinidad	Baleares		

TABLE 5. *ECONOMIC WEIGHT AND LEVEL OF LIFE SUPPORTING DEVELOPMENT*

Island/ Territory Population 1000 HBT	Poor	Underdeveloped		Gap	Starting	Gap	Rate of Development		Developed		
		Low	Medium				Slow	Fast		Gap	
	0-450	450-900	900-1300		1600-2000		3500-4500	4500-6000	6000-8000		13000-
Under 20		Anguilla Tokelu Tuvalu	TS. Kaikos Niue Wall. FT		Montserrat						
Micro 20-70	Sao Tome` Kiri Bati Maldives Vanuatu	Dominica	Cook St. Kitts and Nevis		Br. Virgin		Cayman	Nauru			
Mini 70-120	Cape Verde Camoros	Grenada St. Vincent	St. Lucia TTPI		Antigua						
Small 120-180		W. Samoa Solomons			Seychelles		Am. Samoa				
Gap											
Medium-Low 700-1000							Bahamas Barbados		Am. Virgin Guam		Bermuda
Medium-High 1000-1500			Mauritius		Fiji		Malta Guadalupe	Neth. Antilles	N. Caledonia F. Polynesia		
Big 1500-2500							Cyprus Reunion	Martinique			
Gap											
Too Big 3500-4000									Bahrein Baleares		
Gap											
Too Big 5800-6800							Canarias	Trinidad			

TABLE 6: *SOME UNDERDEVELOPED ISLAND STATES INTEGRATED INDEX SYSTEM CLASSIFICATION*

State	Cape Verde	Sao Tome	Como-ros	Mal-dives	Samoa West
Population (x 1 000) (1981)	330	88	370	160	157
GNP per capita in US $(1981)	340	370	320	260	350
Indicator Positive					
1	12	44	24	2	65
2	30	5	15	50	10
3	2	100	18	45	100
4	5	5	8	3	10
5	1	-	-	-	-
6	-	-	5	30	24
7	200	50	200	100	100
8	15	15	20	20	15
9	25	10	18	21	23
10	50	5	40	3	40
11	5	4	10	7	20
12	53	33	38	8	15
13	20	-	20	10	30
Total	418	351	416	299	452
Indicator Negative					
1	20	20	40	10	40
2	50	50	30	130	120
3	30	10	30	50	40
4	20	-	10	5	20
5	-	-	-	-	-
6	50	20	20	100	20
7	30	40	30	80	60
Total	200	140	160	375	300
Balance	218	211	256	- 76	152